

WATER QUALITY REPORT

Your drinking
water is
SAFE!



The City Hialeah Department of Water and Sewers is pleased to provide our customers with our Annual Water Quality Report. The publishing of this report is required each year by the Safe Drinking Water Act and State of Florida regulations. This report also serves as a reference with important information on the quality of water we deliver and provides you with contacts and telephone numbers you may need from time to time. The report contains:

- Your drinking water source • Contaminants detected in your drinking water • Expected drinking water contaminants • Information for at risk population • Definitions of technical and regulatory terms
- Detailed information on detected contaminants • Any monitoring failure or violations
- Contacts for more information.

WHERE DO WE GET OUR WATER?

We purchase our water from Miami-Dade County. Miami-Dade obtains its water from the Biscayne Aquifer, an underground geological formation where water is stored. It is the sole source of fresh water for Miami-Dade County. It continues as a reliable source since the early 1920's. Water from the Biscayne Aquifer is pumped to treatment facilities throughout Miami-Dade County, including the Hialeah Water Treatment Plant and the John E. Preston Water Treatment Plant. On average, more than 330 million gallons per day are provided to county residents. Hialeah residents use approximately 24 gallons per day.

EXPECTED DRINKING WATER CONTAMINANTS

Contaminants that may be present in SOURCE WATER include:

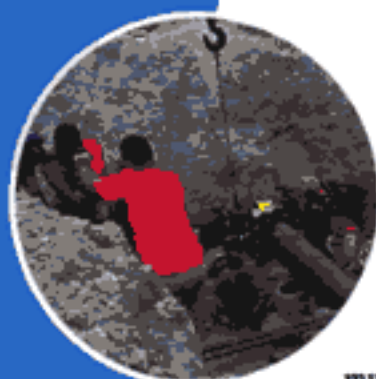
- A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establishes limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791, or by visiting the agency website at www.epa.gov/safewater.

A SPECIAL NOTE TO AT-RISK POPULATIONS

While the Safe Drinking Water Act regulations are intended to protect consumers throughout their lifetime, some people may be more vulnerable to infections from drinking water than the general population. These "at-risk" populations include: immunocompromised persons such as persons with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and in some cases, elderly people and infants. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water hotline.



JULY 2005

Mayor's Message

I am pleased to report once again that the City's water supply meets or exceeds all federal and state guidelines of safe water for the 2004 reporting period. Our annual Water Quality Report presents information about the quality of the water we deliver to you every day. We continue to meet our stated goal of providing a safe and dependable supply of drinking water to all our residents and businesses alike. The Safe Drinking Water Act (SDWA) and its 1996 amendments ensure that public health and safety are protected in the drinking water supply made available for public consumption. Our drinking water meets or exceeds all safe drinking water standards established by the Florida Department of Environmental Protection (FDEP), the Florida Department of Health and the United States Environmental Protection Agency (EPA).

We continue to deliver over 24 million gallons of water per day (MGD) for domestic and public use. The City's Department of Water and Sewers trained personnel monitor and analyze for contaminants in your water supply on a continuous basis. I encourage you to take the time and review this report to learn more about our water and its quality.



RAUL L. MARTINEZ
MAYOR

HOW CAN I HAVE BETTER TASTING WATER?

It may be stating the obvious, but water drawn from the tap may have chlorinous odors. It may have also been in contact with pipes for hours or even longer. It may contain dissolved air, and it may be warmer than you may like. You can improve the taste of your drinking water by simply drawing it after other water uses, which brings fresh water to the tap, then allowing it to stand several hours or longer in a clean odor-free pitcher or bottle. You can store your water either on the kitchen counter or in the refrigerator, depending on which temperature you prefer. If you store the water in the refrigerator, you may want to be sure it is capped to help prevent picking up refrigerator odors.

**HAVE
QUESTIONS
ABOUT THIS
REPORT**



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City of Hialeah

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Hialeah, Florida 33012

CITY WEB SITE

www.ci.hialeah.fl.us

DEFINITIONS OF TECHNICAL AND REGULATORY TERMS

The tables in this report are based on tests conducted in the year 2004 or the most recent testing done within the last five (5) calendar years. The definitions below show the meaning of abbreviations and symbols used in the tables.

Parts Per Billion (ppb.) Some constituents in water are measured in very small units. One ppb equals one microgram per liter. For example, one part per billion equals 2 drops of water in a 15,000 gallon backyard swimming pool, one second of time in 31.7 years, or the first 16 inches of a trip to the moon.

Parts Per Million (ppm.) one ppm equals one milligram per liter or 1000 times more than a ppb. One part per million equals a cup of water in a typical 15,000 gallon backyard swimming pool or one second of time in 11.6 days.

Picocurie Per Liter (pCi/L.) The quantity of radioactive material in one liter that produces 2.22 nuclear disintegrations per minute.

Point of Entry (POE). All water sources are monitored at the point of entry to the distribution system before any customer but after the required treatment.

Action Level. The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement that a water system must follow.

Maximum Contaminant Level (MCL). The highest level of a contaminant that is allowed in drinking water. MCL are set as close to the MCLGs as feasible using the best available treatment technology. If a contaminant is believed to cause health concerns in humans, then the MCL is set as close as practical to zero and at an acceptable level of risk. Generally, the maximum acceptable risk of cancer is 1 in 10,000 with 70 years of exposure.

Maximum Contaminant Level Goal (MCLG). The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

ANY MONITORING FAILURES OR VIOLATIONS?

Periodically we conduct numerous audits to verify that all required monitoring has been completed and reported to the State. In 2004 our results for the testing period of July-December, 2004 were submitted after the deadline; however, there have been no failures or violations of water quality standards during 2004.

WHAT THE EPA SAYS ABOUT MCLs AND HEALTH EFFECTS

The Maximum Contaminant Levels (MCLs) set by the EPA are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effects.

CITY OF HIALEAH 2004 WATER QUALITY REPORT

PARAMETER	FEDERAL MCL (a)	FEDERAL GOAL (b)	STATE MCL	YEAR TESTED	MAIN SYSTEM	MAJOR SOURCES
MICROBIOLOGICAL CONTAMINANTS						
Total Coliform Bacteria (c)	5%	0	5%	2004	0.2%	Naturally present in the environment
DISINFECTION BYPRODUCTS						
Total Trihalomethanes (ppb) (d)	80	NE	80	2004	14 (ND - 33)	Byproduct of drinking water chlorination
Haloacetic Acids (ppb) (d)	60	NE	60	2004	20 (ND - 49)	Byproduct of drinking water chlorination
DISINFECTANTS						
Chloramines (ppm)	MRDL=4	MRDLG=4	MRDL=4	2004	2.3 (1.9 - 2.7)	Water additive used to control microbes
Chlorine (ppm)	MRDL=4	MRDLG=4	MRDL=4	2004	N/A	Water additive used to control microbes
VOLATILE ORGANIC CONTAMINANTS						
cis-1, 2-Dichloroethylene (ppb)	70	70	70	2004	ND	Discharge from industrial chemical factories
INORGANIC CONTAMINANTS						
Arsenic (ppb)	50	NE	50	2002 (h)	1 (0.6 - 1)	Erosion of natural deposits
Barium (ppm)	2	2	2	2002 (h)	0.008 (0.007 - 0.008)	Erosion of natural deposits
Chromium (ppb)	100	100	100	2002 (h)	0.2 (0.1 - 0.2)	Erosion of natural deposits
Copper (ppm) (e)	AL = 1.3	1.3	AL = 1.3	2002/03 (f)	0.08, 0 homes out of 111 (0%) exceeded AL	Corrosion of household plumbing systems
Fluoride (ppm)	4	4	4	2002 (g)	0.9 (0.7 - 0.9)	Erosion of natural deposits; water additive which promotes strong teeth
Lead (ppb) (e)	AL = 15	0	AL = 15	2002/3 (f)	4, 3 homes out of 111 (2.7%) exceeded AL	Corrosion of household plumbing systems
Nickel (ppb)	NE	NE	100	2002 (h)	ND	Corrosion of bronze
Nitrate (as N) (ppm)	10	10	10	2004	ND	Erosion of natural deposits; Runoff from fertilizer use
Nitrite (as N) (ppm)	1	1	1	2004	ND	Erosion of natural deposits; Runoff from fertilizer use
Selenium (ppb)	50	50	50	2002 (h)	ND	Erosion of natural deposits
Sodium (ppm)	NE	NE	160	2002 (h)	35 (27 - 35)	Erosion of natural deposits and sea water
Thallium (ppb)	2	0.5	2	2002 (h)	ND	Discharge from electronics, glass and drug factories
RADIOACTIVE CONTAMINANTS						
Alpha Emitters (pCi/L)	15	0	15	2003 (h)	4.7 (0.7 - 4.7)	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	5	2003 (h)	0.9 (0.3 - 0.9)	Erosion of natural deposits
Uranium (ug/L)	30	0	30	2003 (h)	1.7 (0.2 - 1.7)	Erosion of natural deposits

WATER QUALITY TERMINOLOGY USED IN THIS REPORT

- (a) MCL = Maximum Contaminant Level
 (b) Federal Goal = MCLG = Maximum Contaminant Level Goal
 (c) The MCL for total coliform bacteria states that drinking water must not show the presence of coliform bacteria in $\geq 5\%$ of monthly samples. A minimum of 390 samples for a total coliform bacteria testing are collected each month from the main distribution system (55 samples from the South Dade Water Supply distribution system) in order to demonstrate compliance with regulations.
 (d) A total of 48 samples for Total Trihalomethane and Haloacetic Acid testing are collected per year from the Main Distribution System (20 samples from the South Dade Water Supply Distribution System) in order to demonstrate compliance with State regulations. Compliance is based on a running annual average. This is the value that precedes the parenthesis.
 (e) 90th percentile value reported. If the 90th percentile value does not exceed the AL (i.e., less than 10% of the homes have levels above the AL), the system is in compliance and is utilizing the prescribed corrosion control measures.
 (f) The 02/03 data presented for the Main System is from the most recent testing conducted in accordance with regulations. This system is under reduced monitoring that only requires testing every 3 years.
 (g) Fluoride testing to demonstrate compliance with State regulations is required every 3 years in accordance with the State's monitoring framework. However,

- fluoride levels are monitored daily for the Main System treatment plants where fluoride is added to promote strong teeth.
 (h) Data presented is from the most recent testing conducted in accordance with regulations. Testing for this parameter is required every 3 years in accordance with the State's monitoring framework.

ABBREVIATIONS AND NOTES

- AL = Action Level
 MRDL = Maximum residual disinfectant level
 MRDLG = Maximum residual disinfectant level goal
 N/A = Not Applicable
 ND = None Detected
 NE = None Established
 pCi/L = picoCuries per Liter
 ppb = parts per billion or micrograms per liter (ug/L)
 ppm = parts per million or milligrams per liter (mg/L)
 () = Ranges (low-high) are given in parenthesis where applicable

*** THE CITY OF HIALEAH OBTAINS ALL OF ITS WATER FROM MIAMI-DADE COUNTY. THIS INFORMATION IS PROVIDED BY MIAMI-DADE COUNTY.**

2004 RADON DATA SUMMARY

PARAMETER	FEDERAL GOAL	FEDERAL MCL	STATE MCL	YEAR TESTED	MAIN SYSTEM	MAJOR SOURCES
RADON (pCi/L)	NE	NE	NE	2004	117 (2 - 117)	Naturally occurring in soil and rock formations



WHAT I SHOULD KNOW ABOUT CERTAIN CONTAMINANTS?

RADON - Radon 222, or radon for short, is a colorless, odorless gas that occurs naturally in soil, air and water. Radon is formed from the radioactive decay products of natural uranium that is found in many soils. Most radon in indoor air comes from the soils below the foundation of the home, and in some locations can accumulate to dangerous levels in the absence of proper ventilation. In most homes, the health risk from radon in drinking water is very small compared to the health risk from radon in indoor air. For more information, call the EPA's radon Hotline at 1-800-SOS-RADON.

In October 1999, the EPA proposed a Maximum Contaminant Level (MCL) of 300 pCi/L or an alternative maximum contaminant level (AMCL) of 400 pCi/L for radon. The AMCL requires development of a multimedia mitigation (MMM) program, which also addresses radon exposure from indoor air. Action on a final rule is pending.

CRYPTOSPORIDIUM - In April 1993, the cryptosporidiosis outbreak in Milwaukee, Wisconsin alerted water utilities to the potential threat that this protozoan organism presents to public water supplies. There were an estimated 400,000 cases of diarrhea and several deaths associated with the disease in severely immunocompromised persons. This organism is primarily associated with surface water sources.

Although the MDWASD uses the Biscayne Aquifer as a source of supply, the state has raised the issue that some groundwater sources may be under the direct influence of surface water (UDI) and therefore, are susceptible to the Cryptosporidium organism. As a result of the UDI issue and the sensitivity of the immunocompromised, the MDWASD first tested for Cryptosporidium in 1993 and has continued testing monthly since 1994. To date, neither Cryptosporidium nor Giardia, another protozoan, have been found in the source water supplying the MDWASD's water treatment plants.

NITRATE - Although the level of nitrate (refer to the table on water quality data) is consistently below the health effect level, the EPA requires the following information be included in this report: "Nitrate in drinking water at levels above 10ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue-baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall of agriculture activity. If you are caring for an infant, you should ask advice from your health care provider."

TOTAL TRIHALOMETHANES (TTHMS) are formed when chlorine combines with naturally occurring organic matter. These compounds are found at very low concentrations. The compound that make up the TTHMs include chloroform, bromodichloromethane, bromoform, and chlorodibromomethane. The result during 2004 for TTHMs was 14 ppb. The MCL is 80 ppb.

LEAD AND COPPER are naturally occurring metals, which are generally found at very low levels in source water. However, these levels can increase when water contacts plumbing materials that contain lead or copper or brass. Infants and young children are more vulnerable to lead in drinking water than the general population. Concerned customers can take an extra precaution to protect children from lead leached from faucets by running the water for a few seconds and using the water for something other than drinking. This is especially important if the water has been sitting in the pipes for a few hours or more. These same precautions also help to give you the best tasting water. The last required lead and copper monitoring was performed in 2002/03. The results were well below the action levels.

There are no detectable levels of lead in the water supplied by the MDWASD. Research has shown, however, that infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community because of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by an independent laboratory. Additional information is available from Safe Drinking Water Hotline (1-800-426-4791).

ARSENIC - EPA recently finalized a reduction in the arsenic drinking water standard from 50 ppb down to 10 ppb. All water utilities must meet this reduced standard value beginning January 2006. While your drinking water meets USEPA's reduced standard for arsenic, it does contain low levels of arsenic. USEPA's new standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. USEPA continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory system, and may have an increased risk of getting cancer.

BARIUM occurs naturally at very low concentrations in our groundwater. The barium value in 2004 was 0.008 ppm (the MCL is 2 ppm).

FLUORIDE is an important naturally occurring mineral that helps to form healthy teeth and bones. A concentration of 1ppm is considered optimum. At concentrations above 2 ppm, fluoride can cause mild discoloration of teeth, and exposure at above the MCL of 4 ppm can cause both severe discoloration and over many years of exposure, bones diseases.

COLIFORM BACTERIA are very commonly found in the environment and in the digestive tract of animals. While rarely harmful, Coliform bacteria in drinking water is an indicator that the water may also contain harmful microorganisms. In 2004 the total Coliform sample was 0.2%. (The MCL is 5%).

ALPHA EMITTERS is a measure of radioactivity due to naturally occurring minerals in groundwater. The MCL excludes the radioactivity contributed by either radon or uranium. Sampling of our water alpha emitters conducted in 2004 was 4.7 Picocurie per liter (pCi/L). The MCL is 15 pCi/L.

URANIUM is a metallic element, which is highly toxic and radioactive. The USEPA has set a new standard of 30 ppb for uranium, which water systems must have met by December 2003. A sampling of our water for uranium was conducted in 2003. The level for uranium during 2003 was 1.7 ppb.



Raúl L. Martínez
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